There are no amendments to the claims and the listing of claims following are the original claims filed.

Listing of Claims:

1. (original) A method of driving the coil of an electrohydraulic valve with a PWM drive, comprising:
transmitting a feedback signal to a digitizing device that is electrically connected to the electrohydraulic valve;
sampling the feedback signal within the digitizing device to create a plurality of signal samples;
transmitting the plurality of samples to an accumulator;
averaging the plurality of samples within the accumulator to create an average value; and
transmitting the average value to a closed loop control algorithm that generates a pulse width signal to drive the coil of the electrohydraulic valve.

2. (original) The method of claim 1 wherein the digitizing device is an AtoD converter.

3. (original) The method of claim 1 wherein the digitizing device is a DSP.

4. (original) The method of claim 1 wherein the digitizing device is a micro controller.

5. (original) The method of claim 1 wherein the algorithm is a PI algorithm.

6. (original) The method of claim 1 wherein the algorithm is a PID algorithm.

7. (original) The method of claim 1 wherein the accumulator resets when the algorithm sends the pulse width signal to the coil of the electrohydraulic valve.

8. (original) A method of driving a pulse width modulator comprising:
transmitting a feedback signal from the pulse width modulator to a finite impulse response filter;
calculating an average current in the signal with the finite impulse response filter; and
generating a pulse width signal in response the average current in the signal via an algorithm.

9. (original) A method of driving the electric coil of a machine with a pulse width modulator comprising:
transmitting a feedback signal to a digitizing device that is electrically connected to the electric coil of the machine;
calculating the amount of average current in the coil with the digitizing device;
transmitting the average current amount to an algorithm;
generating a pulse width signal in response to the average current in the coil with the algorithm.